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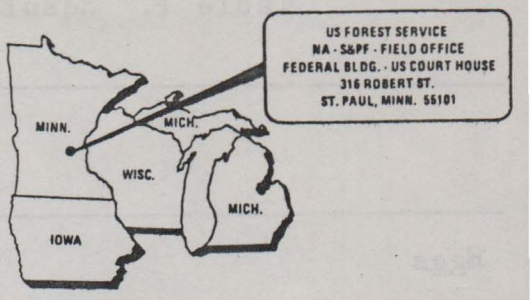
Northeastern Area
State & Private Forestry
DIVISION OF FOREST PEST CONTROL



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RESULTS OF RED-HEADED PINE SAWFLY EGG SURVEY ON THE HIAWATHA NATIONAL FOREST

R. F. Fowler

INTRODUCTION

An infestation of red-headed pine sawfly Neodiprion lecontei (Fitch) on the St. Ignace Ranger District (T42N, R4W, Sec 31 SENW) of the Hiawatha National Forest was evaluated the fall of 1968.1/ A suppression project was proposed for the 30 acres involved. The purpose of the egg batch survey conducted June 27, 1969, was to confirm the continued presence of the insect population and measure its intensity.

METHODS

The egg batch and defoliation survey was conducted by the author. A total of 34 sample points were systemically located throughout the plantation. The closest 5 trees to each point were examined for a total of 170 trees. The data collected per tree was: 1) no eggs present, 2) eggs present, 3) partially defoliated last year, and 4) dead from defoliation.

RESULTS

The survey results are presented in Table 1. Presently 57% of the living trees have one or more egg batches and considerable defoliation is expected. Half of the trees partially defoliated last year will be defoliated again this year and mortality is likely to result. The sawfly population has about doubled in the past year showing the lack of effective natural controls.

On the basis of mortality already sustained and the high egg batch counts, we recommend that the proposed control project be executed.

Table 1. Results of egg batch and defoliation survey

	Number of trees	% of living trees	% of all trees examined
Eggs	86	57	--
No eggs	64	43	--
Partially defoliated last year	40	27	--
Dead from defoliation	20	--	12

1/ HASTINGS, A. R. 1968. Biological evaluation of red-headed pine sawfly infestations on the Ottawa and Hiawatha National Forests 1968. USDA, Forest Service, Northeast Area, S&PF, Division of Forest Control. Report No. S-69-12.